User Guide

XTP Extender

XTP T UWP 202

Two Input XTP Transmitter – Decora® Wallplate

Extron Electronics
INTERFACING, SWITCHING AND CONTROL

68-2033-01 Rev. A
03 14

Safety Instructions

Safety Instructions • English

WARNING: This symbol, ⚠, when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

ATTENTION: This symbol, ⚠, when used on the product, is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

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Instructions de sécurité • Français

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ATTENTION : Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur des instructions d'utilisation ou de maintenance importantes qui se trouvent dans la documentation fournie avec le matériel.

Pour en savoir plus sur les règles de sécurité, la conformité à la réglementation, la compatibilité EMI/EMF, l'accessibilité, et autres sujets connexes, lisez les informations de sécurité et de conformité Extron, réf. 68-290-01, sur le site Extron, **www.extron.com**.

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Chinese Simplified（简体中文）

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Korean

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주의: 이 기호 ⚠ 가 제품에 사용될 경우, 장비와 함께 제공된 책자에 나와 있는 주요 운영 및 유지보수(정비) 지침을 경고합니다.

안전 가이드라인, 규제 준수, EMI/EMF 호환성, 접근성, 그리고 관련 항목에 대한 자세한 내용은 Extron 웹 사이트(**www.extron.com**)의 Extron 안전 및 규제 준수 안내서, 68-290-01 조항을 참조하십시오.

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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. The Class A limits provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference. This interference must be corrected at the expense of the user.

ATTENTION: The Twisted Pair Extension technology works with shielded twisted pair (STP) cables **only**. To ensure FCC Class A and CE compliance, STP cables and STP connectors are also required.

For more information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the "**Extron Safety and Regulatory Compliance Guide**" on the Extron website.

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Conventions Used in this Guide

Notifications

The following notifications are used in this guide:

WARNING: A warning indicates a situation that has the potential to result in death or severe injury.

CAUTION: A caution indicates a situation that **may** result in minor injury.

ATTENTION: Attention indicates a situation that may damage or destroy the product or associated equipment.

NOTE: A note draws attention to important information.

TIP: A tip provides a suggestion to make working with the application easier.

Software Commands

Commands are written in the fonts shown here:

```
^AR Merge Scene,,Op1 scene 1,1 ^B 51 ^W^C
[Ø1] R ØØØ4 ØØ3ØØ ØØ4ØØ ØØ8ØØ ØØ6ØØ [Ø2] 35 [17] [Ø3]
```

Esc X1 * X17 * X20 * X23 * X21 CE ←

NOTE: For commands and examples of computer or device responses mentioned in this guide, the character "Ø" is used for the number zero and "O" represents the capital letter "o."

Computer responses and directory paths that do not have variables are written in the font shown here:

```
Reply from 2Ø8.132.18Ø.48: bytes=32 times=2ms TTL=32
C:\Program Files\Extron
```

Variables are written in slanted form as shown here:

```
ping xxx.xxx.xxx.xxx –t
SOH R Data STX Command ETB ETX
```

Selectable items, such as menu names, menu options, buttons, tabs, and field names are written in the font shown here:

From the **File** menu, select **New**.

Click the **OK** button.

Specifications Availability

Product specifications are available on the Extron website, **www.extron.com**.

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Introduction

This section contains general information about this guide and the Extron XTP T UWP 202 Wallplate Transmitter, and selected device features. Topics in this section include:

- **About this Guide**
- **About the XTP T UWP 202**
- **Key Features**

About this Guide

This guide contains installation, operation, and control procedures, and reference information for the XTP T UWP 202 Wallplate Transmitter. In this guide, the terms "XTP T UWP 202" and "transmitter" are used interchangeably to refer to all models of the XTP T UWP 202 Wallplate Transmitter.

About the XTP T UWP 202

The Extron XTP T UWP 202 is a two-input transmitter that sends HDMI or RGBHV video, audio, and bidirectional RS-232 and IR up to 330 feet (100 meters) over a single shielded twisted pair (STP) cable. This two-gang wallplate transmitter supports computer-video signals up to 1920x1200, including HDTV 1080p/60 Deep Color and 2K. The XTP T UWP 202 works with XTP Systems for signal distribution and long-distance transmission between remote endpoints. It comes in a model with a front panel Ethernet port to enable Ethernet extensions for LAN access and a model without a front panel Ethernet port.

The XTP T UWP 202 can be powered locally or remotely through an Extron Power Injector or XTP matrix switcher (see **Power Connection** on page 14).

To configure and control the XTP T UWP 202, connect a host device, such as a computer, and enter Simple Instruction Set (SIS) commands (see **SIS Configuration and Control** on page 18) or use the XTP System Configuration Software (see **XTP System Configuration Software** on page 23).

Figure 1 shows a typical point-to-point application of the XTP T UWP 202 with two input sources.

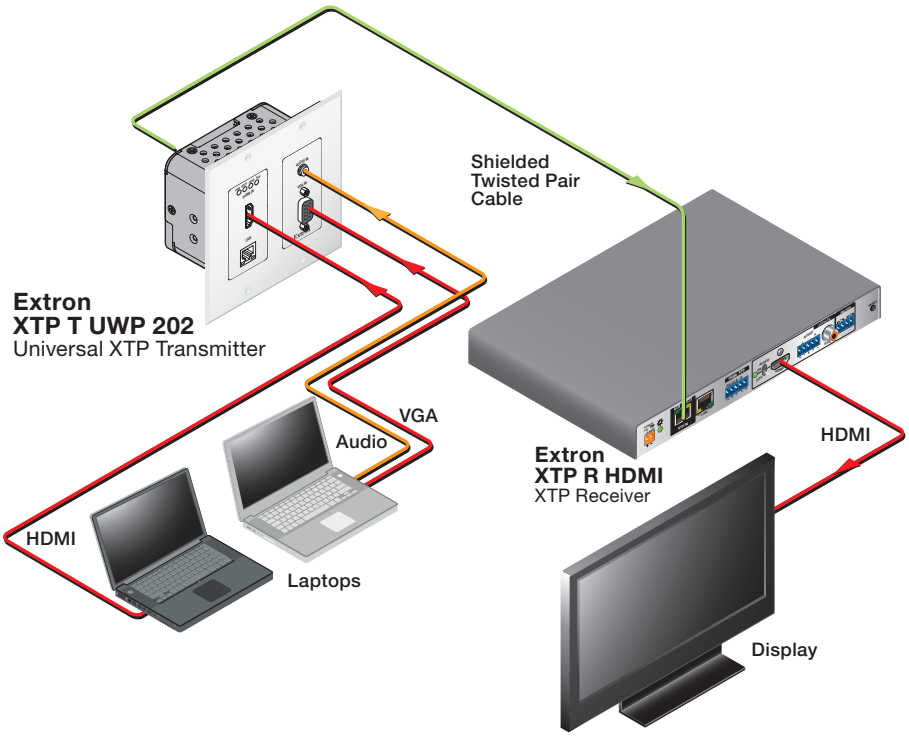


Figure 1. Typical Point-to-Point Application Diagram (LAN Model Shown)

Key Features

Wall mountable — Mounts in a two-gang metal junction box or the provided mud ring.

Inputs — Include one HDMI input and one VGA input.

Support for computer-video to 1920x1200, including HDTV 1080p/60 Deep Color and 2K signals — Supports digital signal transmission up to 330 feet over a single twisted pair cable, maintaining superior image quality at the highest resolutions.

Shielded twisted pair cable compatibility — Optimized for use with common shielded twisted pair cable types. XTP systems fully support a maximum transmission distance of 330 feet (100 meters) for all compatible resolutions when used with shielded twisted pair cable. Shielded twisted pair cabling with solid center conductor sizes of 24 AWG or better is recommended for optimal performance.

Digital conversion of analog video and audio input signals — Digitizes analog signals, ensuring that a reliable, high quality digital video signal is sent to the output destination.

Auto-input switching — Automatically switches to the highest or lowest priority input with an active video signal for simplified operation.

Bidirectional RS-232 and IR insertion — Allows a remote display to be controlled without the need for additional cabling through bidirectional RS-232 control and IR signals inserted into the XTP output.

HDMI specification features — Support data rates up to 6.75 Gbps, Deep Color up to 12-bit, 3D, HD lossless audio formats, and CEC pass-through.

HDCP-compliance — Ensures display of content-protected media and interoperability with other HDCP-compliant devices.

EDID Minder — Automatically manages EDID communication between connected devices to ensure that all sources properly power up and reliably display content.

Key Minder — Authenticates and maintains continuous HDCP encryption between input and output devices to ensure quick and reliable switching in professional AV environments, while enabling simultaneous distribution of a single source signal to one or more displays.

Remote power capability — To simplify integration, the XTP T UWP 202 can be powered by an XTP CrossPoint Matrix Switcher or XTP Power Injectors.

Multiple embedded audio formats — Compatible with a broad range of multi-channel audio signals, providing reliable operation with HDMI sources.

Selectable analog stereo audio input embedding — Supports unbalanced audio for extended transmission. This feature enables direct connection of separate stereo audio signals from a laptop, Blu-ray Disc™ player, or other device.

RS-232 control — Features an RS-232 serial port for control and configuration.

Audio input gain and attenuation — Allows the level of gain or attenuation to be set, eliminating noticeable volume differences when switching between sources.

EDID and HDCP transmission — DDC channels are actively buffered, allowing continuous communication between source and display.

Installation and Operation

This section contains information for mounting, connecting, and wiring the XTP T UWP 202. Topics in this section include:

- **Installation Overview**
- **Installing the Metal Junction Box or Mud Ring**
- **Rear and Side Panel Connectors**
- **Mounting the XTP T UWP 202**
- **Front Panel Connectors**
- **Making Connections**
- **Operation**

Installation Overview

The XTP T UWP 202 can be installed into the provided mud ring or an UL Listed metal electrical junction box.

ATTENTION: If using a junction box, use a metal one only.

1. Prepare the mounting surface.

   CAUTION: Risk of personal injury. Failure to check the items listed below may result in personal injury.

   ATTENTION: Failure to check the items listed below may result in property damage.

   - Ensure there are no utility cables or pipes at the intended location that might be damaged or cause injury when installing the device.
   - Check that the installation meets building, electrical, and safety codes.
   - Ensure there is sufficient space behind the device.
   - Choose a location that will allow cable runs without interference.

     NOTES:
     - Cables may need to be installed in the wall or conduits before installation.
     - The mud ring does not require attachment to wall studs.
     - For metal junction boxes, refer to the manufacturer for more installation requirements.

2. Cut a hole in the mounting surface (see **Cutting an Opening in the Mounting Surface** on page 5).
3. Install the mud ring or metal junction box in the mounting surface (see **Installing the Mud Ring** on page 6 or **Installing a UL Listed Metal Junction Box** on page 7).

4. Route and connect cables to the rear and side panel connectors (see **Rear and Side Panel Connectors** on page 7).
5. Mount the XTP T UWP 202 to the mud ring or metal junction box (see **Mounting the XTP T UPW 202** on page 9).
6. Connect inputs to the front panel connectors (see **Front Panel Connections** on page 10).
7. Supply power to all connected devices.

Installing the Metal Junction Box or Mud Ring

Cutting an Opening in the Mounting Surface

1. Using an appropriate template or the mounting enclosure as a guide, mark the area of the wall with a soft pencil that will be cut (for the provided mud ring, see **Mounting Template** on page 40).

   NOTE: Check with the manufacturer of the metal junction box for specific installation requirements.

2. Use a jigsaw or small hand saw to carefully cut away the material within the guidelines drawn in step 1.

   NOTE: If using a template or the mud ring as a guide for cutting the hole in drywall, cut inside the guidelines to maximize the contact the mud ring makes with the drywall.

4. If using a mud ring in a wall with insulation inside, remove at least 6 inches of the insulation in all directions around the cutout.

   NOTE: If a wall stud interferes with removing 6 inches of insulation around the cutout, remove the insulation between the cutout and wall stud.

5. Check the size of the opening by laying the mud ring or metal junction box against it. The mounting device should fit snugly in the opening.
6. If needed, use a saw, file, or sandpaper to enlarge the hole.

   CAUTION: Risk of personal injury. Smooth the edges of the opening to avoid personal injury during installation.

   ATTENTION: Smooth the edges of the opening to avoid damage to the mounting device or the cables.

Installing the Mud Ring

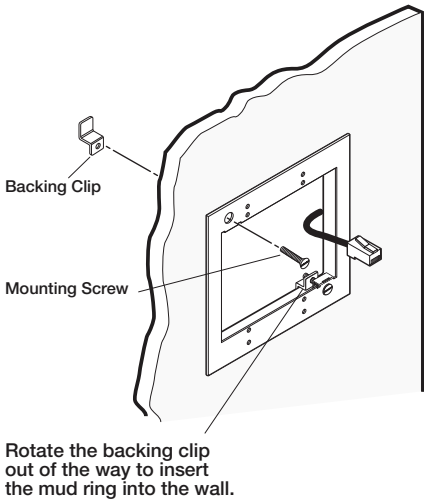


Figure 2. Installing the Mud Ring with Backing Clips

1. Place 1.25 inches (3.18 cm) long or 0.75 inch (1.90 cm) #6-32 thread machine screws through the large holes in the two corners of the mounting bracket. Use the shortest possible screw needed.
2. Loosely fasten the mounting backing clip on the end of each screw.
3. Insert the mounting bracket into the opening in the wall.
4. Rotate each backing clip so that the tab is behind the installation surface to hold the bracket snuggly in place when the screw is tightened.

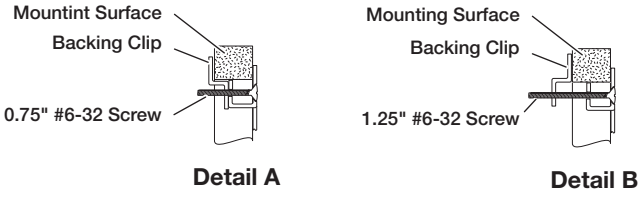


Figure 3. Backing Clip Installation

> **NOTE:** The backing clip can be installed as shown in detail A or detail B (see figure 3).

5. Use a cross-head (Phillips) screwdriver to fasten the screws and backing clips in place.

Installing a UL Listed Metal Junction Box

Metal junction boxes may differ slightly from model to model. Check with the manufacturer for specific installation instructions.

ATTENTION: Use metal junction boxes only.

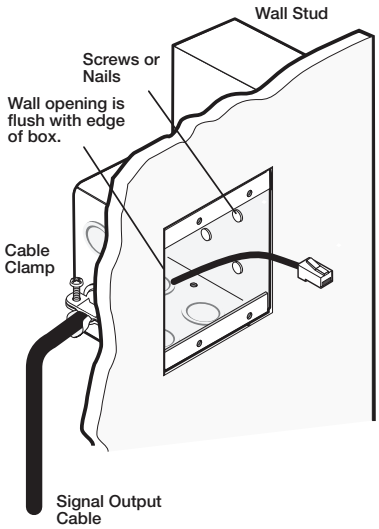
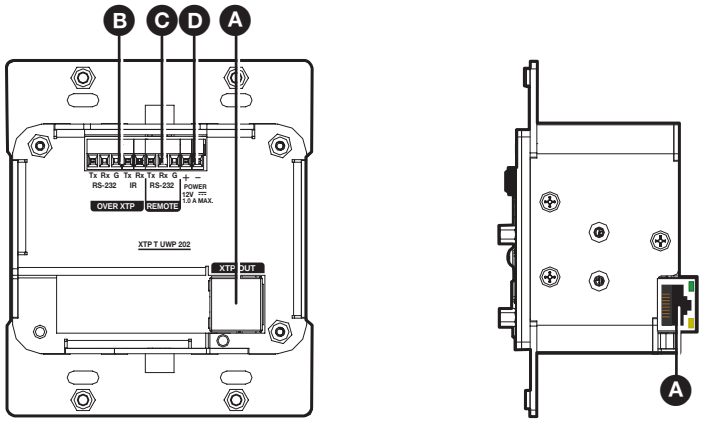


Figure 4. Installing a Metal Junction Box

1. Insert the metal junction box into the hole in the wall.
2. Secure it to the stud using two screws or nails, as appropriate. The front edge of the metal junction box must be flush with the front surface of the wall.
3. Feed cables through a metal junction box knockout opening.
4. Secure cables with clamps or ties to provide strain relief.
5. Trim back and insulate shields with heat shrink.

ATTENTION: To prevent short circuits, the outer foil shield can be cut back to the point where the cable exits the cable clamp. Both braided and foil shields should be connected to an equipment ground at the other end of the cable.

Rear and Side Panel Connectors



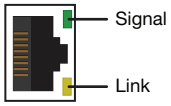
Rear **Side**

- **A** XTP output connector
- **B** RS-232 and IR Over XTP connector
- **C** Remote RS-232 connector
- **D** DC power connector

Figure 5. Rear Panel Connectors

Ⓐ **XTP output connector —** Connect a twisted pair cable to the RJ-45 connector labeled XTP Out on the XTP T UWP 202 and the XTP input port on another XTP device to pass all signals (see **TP Cable Termination and Recommendations** on page 12). This cable carries the following signals:

- Digital video
- Digital audio
- Bidirectional RS-232 and IR commands
- Remote power
- Ethernet communication
- System communication



Signal LED indicator — Lights green when the transmitter outputs an XTP signal to a compatible receiver or matrix switcher.

Link LED indicator — Lights yellow when XTP devices are connected and communication is established.

ATTENTION:

- Do not connect this connector to a computer data or telecommunications network.
- XTP remote power is intended for indoor use only. No part of the network that uses XTP remote power should be routed outdoors (see **Remote power** on page 15).

Ⓑ **RS-232 Over XTP port** — To pass bidirectional serial or other control signals between XTP-compatible devices, connect a control device to the 5-pole direct insertion captive screw connector. The port includes only the 3 poles labeled "RS-232."

IR Over XTP port — To transmit and receive IR signals (up to 40 kHz), connect a control device to the 5-pole direct insertion captive screw connector. This port includes only the 2 poles labeled "IR" and shares the ground pole with the RS-232 port.

NOTE: RS-232 and IR data can be transmitted simultaneously (see **RS-232 and IR Over XTP Communication** on page 13 for wiring details).

Ⓒ **Remote RS-232 connector** — Connect a host device to the 3.5 mm, 3-pole direct insertion captive screw connector for serial control of the transmitter.

Ⓓ **Power connector and LED** — Connect an external power supply to the 2-pole direct insertion captive screw connector. Confirm the polarity of the power supply wires. The Power LED lights to indicate the device is receiving power.

NOTE: The XTP T UWP 202 can also be powered remotely (see **Power Connection** on page 14).

Mounting the XTP T UWP 202

NOTE: If desired, connect a host device to the front panel Config port (see figure 8, E) before mounting to configure the transmitter (see **SIS Configuration and Control** on page 18 or **XTP System Configuration Software** on page 23). Disconnect the host device after configuration is complete.

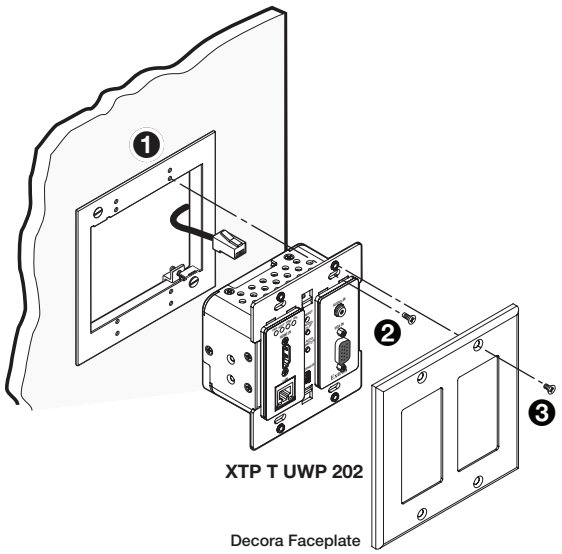


Figure 6. Installing the XTP T UWP 202 (LAN Model Shown) in the Provided Mud Ring

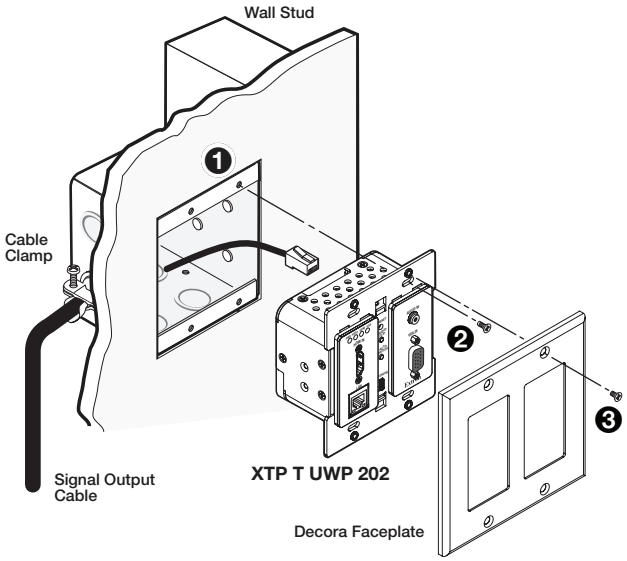
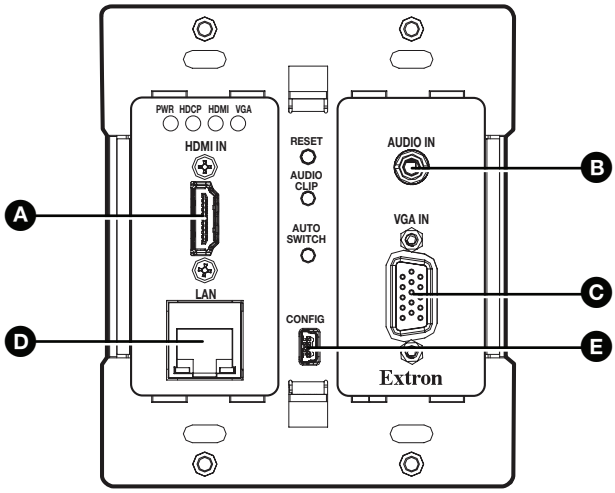


Figure 7. Installing the XTP T UWP 202 (LAN Model Shown) in a Metal Junction Box

1. Align the mounting screws on the XTP T UWP 202 with the available holes on the mud ring (see figure 6, 1) or metal junction box (see figure 7, 1).
2. Using the provided screws, attach the XTP T UWP 202 to the mud ring (see figure 6, 2) or metal junction box (see figure 7, 2).
3. Use four mounting screws to attach the Decora faceplate to the XTP T UWP 202 (see figure 6 or 7, 3).

Front Panel Connectors



- **A** HDMI input connector
- **B** Analog audio input connector
- **C** Analog video input connector
- **D** LAN connector (LAN models only)
- **E** Configuration port

Figure 8. Front Panel Connectors (LAN Model Shown without the Decora Faceplate)

A **HDMI input connector** — Connect a digital video source device to the HDMI connector. It can accept HDMI, DVI (with an appropriate adaptor), or dual mode DisplayPort video sources.

NOTES:

- The maximum HDMI cable length is 15 feet.
- Use an Extron LockIt lacing bracket to secure the HDMI connector to the device (see **HDMI Connection** on page 11).

B **Analog audio input connector** — Connect an analog audio source to the 3.5 mm tip-ring-sleeve (TRS) jack.

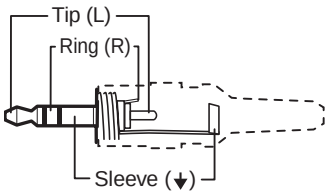


Figure 9. Wiring a TRS Connector for Audio

By default, audio input is selected automatically (see **Audio input selection** SIS commands on page 20 to manually select audio inputs). When the HDMI input is selected with automatic audio input selections, the transmitter prioritizes embedded digital audio. The table on page 11 shows the audio format that is sent over the XTP connection when a specific audio format is not specified.

Selected Video Input	HDMI Embedded Audio Present	Analog Audio Present	Audio Sent Over XTP
VGA	N/A	Yes	Analog audio
VGA	N/A	No	No audio
HDMI	Yes	No	HDMI embedded audio
HDMI	Yes	Yes	HDMI embedded audio
HDMI	No	Yes	Analog audio
HDMI	No	No	No audio

Ⓒ **Analog video input connector** — Connect a video source to the female 15-pin HD connector. It accepts RGBHV video signals.

Ⓓ **LAN connector (LAN model only)** — Connect a control device or device to be controlled to this LAN connector for 10/100 Ethernet communication through this pass-through port. LEDs on this connector indicate link and activity status.

Ⓔ **Configuration port** — If desired, connect a host device to the front panel USB mini-B Config port for configuring the transmitter.

Making Connections

HDMI Connection

Use an Extron LockIt Lacing Bracket to secure an HDMI cable to each connector. The following instructions describe how to attach one HDMI LockIt Lacing Bracket. For more stability, attach a second HDMI LockIt Lacing Bracket to the other mounting screw.

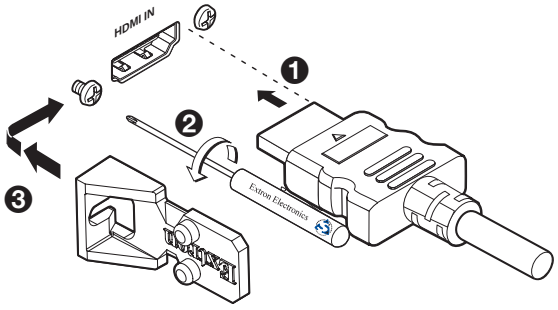
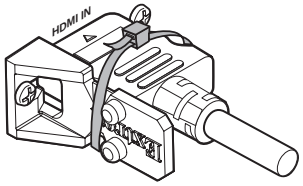


Figure 10. Attaching the HDMI Connector and HDMI LockIt Lacing Bracket

1. Plug the HDMI cable into the panel connection (see figure 10, ❶).
2. Loosen the HDMI connection mounting screw from the panel enough to allow the LockIt lacing bracket to be placed over it (see figure 10, ❷). The screw does not have to be removed.
3. Place the LockIt lacing bracket on the screw and against the HDMI connector, then tighten the screw to secure the bracket (see figure 10, ❸).

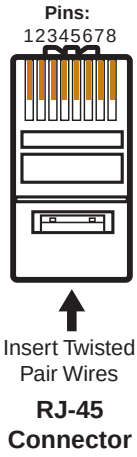
ATTENTION: Do not overtighten the HDMI connector mounting screw. The shield it fastens to is very thin and can easily be stripped.

4. Loosely place the included tie wrap around the HDMI connector and the LockIt lacing bracket as shown (see the image to the right).
5. While holding the connector securely against the lacing bracket, use pliers or similar tools to tighten the tie wrap, then remove any excess length.



TP Cable Termination and Recommendations

Use the following pin configurations for twisted pair cables.



Straight-through Cable (for connection to a switch, hub, or router)			
TIA/EIA-T568A		**TIA/EIA-T568B**	
Pin	**Wire Color**	**Pin**	**Wire Color**
1	White-green	1	White-orange
2	Green	2	Orange
3	White-orange	3	White-green
4	Blue	4	Blue
5	White-blue	5	White-blue
6	Orange	6	Green
7	White-brown	7	White-brown
8	Brown	8	Brown

Figure 11. TP Cable Termination

Supported cables

The XTP T UWP 202 is compatible with shielded twisted pair (F/UTP, SF/UTP, and S/FTP) cable.

ATTENTION:

- Do not use Extron UTP23SF-4 Enhanced Skew-Free AV UTP cable or STP201 cable to link the XTP products.
- To ensure FCC Class A and CE compliance, STP cables and STP connectors are required.

Cable recommendations

Extron recommends using the following practices to achieve full transmission distances up to 330 feet (100 meters) and reduce transmission errors.

- Use the following Extron XTP DTP 24 SF/UTP cables and connectors for the best performance:
  - **XTP DTP 24/1000** Non-Plenum 1000’ (305 m) spool 22-236-03
  - **XTP DTP 24P/1000** Plenum 1000’ (305 m) spool 22-235-03
  - **XTP DTP 24 Plug** Package of 10 101-005-02
- If not using XTP DTP 24 cable, at a minimum, Extron recommends 24 AWG, solid conductor, STP cable with a minimum bandwidth of 400 MHz.
- Terminate cables with shielded connectors to the TIA/EIA-T568B standard (see figure 11).
- Limit the use of more than two pass-through points, which may include patch points, punch down connectors, couplers, and power injectors. If these pass-through points are required, use shielded couplers and punch down connectors.

NOTE: When using STP cable in bundles or conduits, consider the following:

- Do not exceed 40% fill capacity in conduits.
- Do not comb the cable for the first 20 m, where cables are straightened, aligned, and secured in tight bundles.
- Loosely place cables and limit the use of tie wraps or hook and loop fasteners.
- Separate twisted pair cables from AC power cables.

RS-232 and IR Over XTP Communication

The RS-232 and IR Over XTP connector is for pass-through transmission of serial signals, such as projector control signals, and infrared data. To pass bidirectional serial command signals between XTP-compatible devices, connect a control device to the three leftmost poles (Tx, Rx, and G) of the 5-pole captive screw connector. To transmit and receive IR signals, connect a control device to the three rightmost poles (G, Tx, and Rx). The ground (G) pole is shared.

NOTE: RS-232 and IR data can be transmitted or received simultaneously (see figure 12 below for wiring considerations).

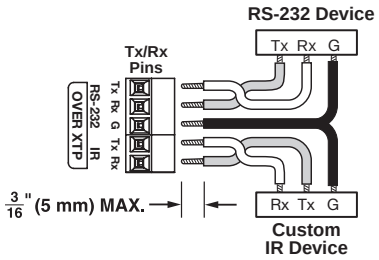


Figure 12. Wiring the RS-232 and IR Over XTP Connector

ATTENTION: The length of exposed wires is critical.

- The ideal length is 3/16 inch (5 mm).
- Longer bare wires can short together.
- Shorter wires are not as secure in the connectors and could be pulled out.

Power Connection

Apply power to the transmitter locally with the provided power supply or remotely with a power injector or an XTP matrix switcher.

ATTENTION: XTP remote power is intended for indoor use only. No part of the network that uses XTP remote power should be routed outdoors.

Local power

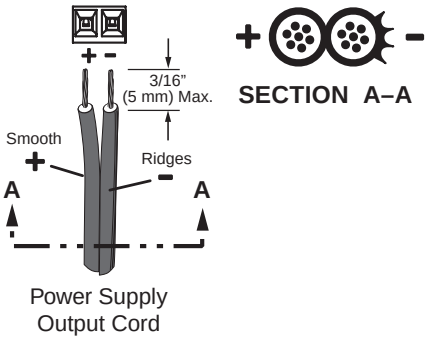


Figure 13. Power Wiring

The XTP T UWP 202 can be connected to a local power supply.

WARNING: Electric shock hazard. The two power cord wires must be kept separate while the power supply is plugged in. Remove power before wiring.

ATTENTION:

- This product is intended to be supplied by a Listed Power Unit marked "Class 2" or "LPS," rated 12 VDC, 1.0 A minimum. Always use a power supply supplied by or specified by Extron. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the end product.
- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities. The installation must always be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 75 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to a building structure or similar structure.
- Power supply voltage polarity is critical. Incorrect voltage polarity can damage the power supply and the unit. The ridges on the side of the cord identify the power cord negative lead.
- The length of the exposed (stripped) copper wires is important. The ideal length is 3/16 inch (5 mm).

TIP: Do not tin the stripped power supply leads. Tinned wires are not as secure in the captive screw connectors and could be pulled out.

Remote power

The XTP T UWP 202 can be powered remotely through an XTP Power Injector or through an XTP matrix switcher.

ATTENTION: XTP remote power is intended for indoor use only. No part of the network that uses XTP remote power should be routed outdoors.

Power injector

To power the XTP T UWP 202 remotely with an XTP Power Injector, power one device locally (see **Local power** on page 14) and connect an XTP Power Injector to the XTP cable run along the XTP ports (see the *XTP Power Injector User Guide* for more installation information).

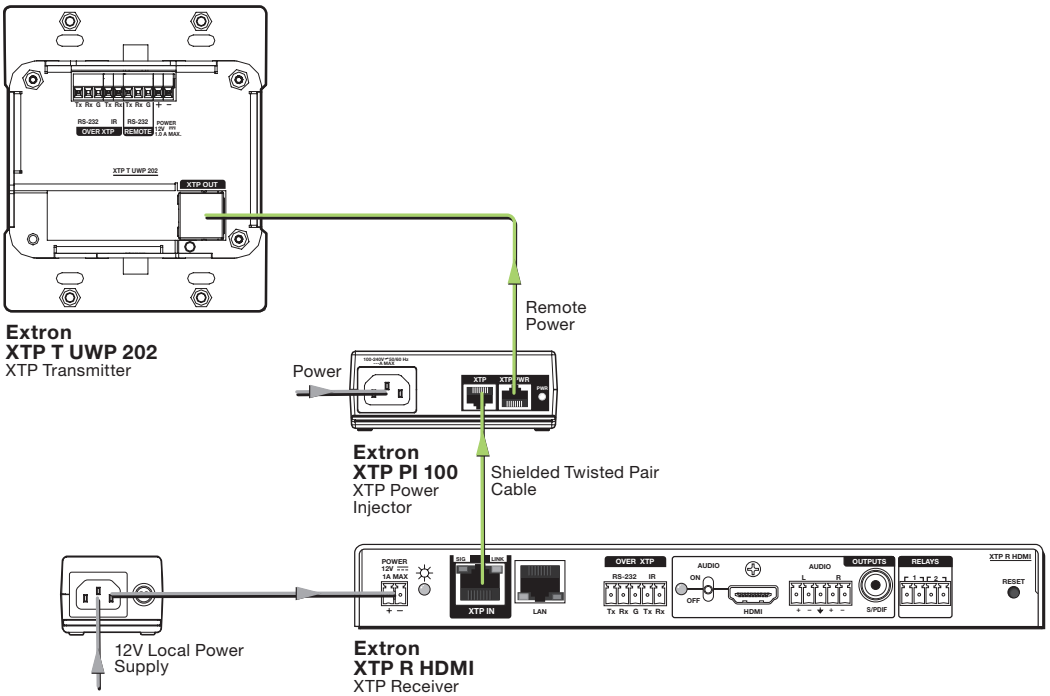


Figure 14. Typical Pont-to-point Application with Remote Power

NOTE: The power injector provides remote power up to 330 feet with a shielded twisted pair cable with 24 AWG wire.

Direct power from an XTP matrix switcher

XTP matrix switchers have a fixed amount of power available to provide remote power to connected XTP devices (see the XTP matrix switcher user guide for more details). To manage available power from the XTP matrix switcher, use the XTP System Configuration Software with the XTP matrix switcher.

Operation

After all transmitters, all receivers, and their connected devices are powered up, the system is fully operational. If any problems are encountered, verify that the cables are routed and connected properly. If problems persist, call the Extron S3 Sales & Technical Support Hotline. See the **contact numbers** on the last page of this guide for the nearest Extron office.

Indicators

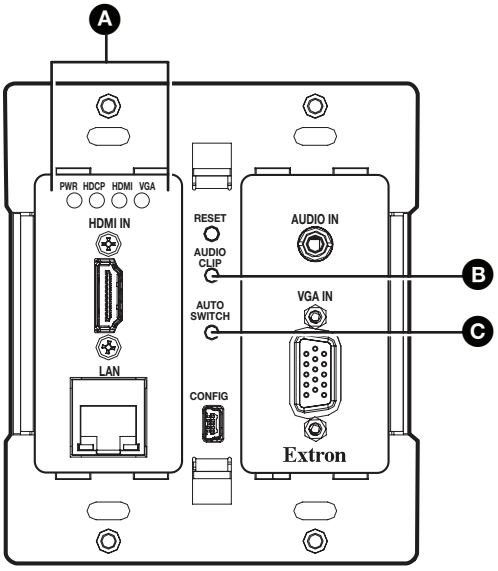


Figure 15. Front Panel Indicators (LAN Model Shown without the Decora Faceplate)

Ⓐ **Signal LED Indicators:**

Power LED indicator — Lights when power is applied to the unit.

HDCP LED indicator — Lights when the input signal is encrypted.

HDMI LED indicator — Lights when an HDMI input video signal is detected.

VGA LED indicator — Lights when a video signal is detected on the VGA input.

Ⓑ **Audio clipping LED indicator** — Lights when the analog audio input signal is -3 dBFS or above. The light remains lit for 200 ms after the audio input signal drops below -3 dBFS.

Ⓒ **Auto switch LED indicator** — Lights when the transmitter is in auto switch mode.

EDID

To manage EDID on the XTP T UWP 202, use the XTP System Configuration Software (see **EDID Minder** on page 34). The XTP T UWP 202 can record and save EDID in a user memory location, select a pre-defined EDID, or use EDID from a display connected to a receiver. EDID stored in the user memory location can come from the display connected to a receiver or a custom EDID imported through the XTP System Configuration Software.

NOTE: In matrix applications, EDID on the transmitter is assigned by the matrix switcher using the XTP System Configuration Software.

Reset Modes

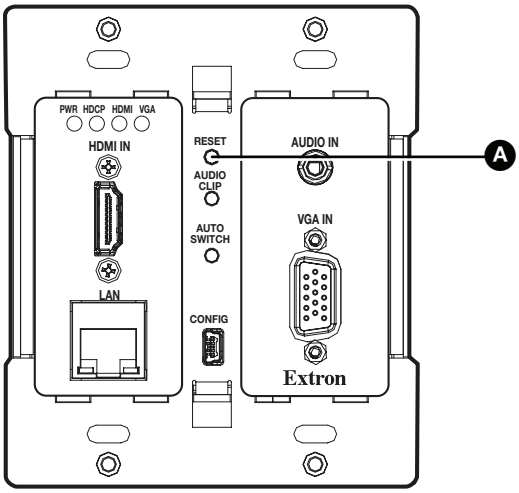


Figure 16. Reset Button (LAN Model Shown without the Decora Faceplate)

Use the recessed Reset button on the front panel of the transmitter to return the device to default settings or to restore factory-shipped firmware. To access the Reset button, the faceplate may need to be removed (see figure 16, A).

	Reset Mode Summary		
	Mode Activation	**Result**	**Purpose/Notes**
Factory Reset (Mode 1)	Press the recessed Reset button while applying power to the device. **NOTE:** After a mode 1 reset, update the device with the latest firmware version. DO NOT operate the firmware version that results from this mode reset.	The device reverts to the factory default firmware. **NOTE:** If you do not want to update the firmware or if you perform a mode 1 reset by mistake, cycle power to the device to return the firmware version running prior to the reset.	Use mode 1 to roll back to factory firmware for a single power cycle if an incompatibility issue arises.

SIS Configuration and Control

The XTP T UWP 202 can be configured and controlled using Extron Simple Instruction Set (SIS) commands or the XTP System Configuration Software (see **XTP System Configuration Software** on page 23). This section contains basic SIS communication details and SIS commands and responses when connected directly to the XTP T UWP 202. Topics in this section include:

- **Host Device Connection**
- **SIS Programming Guide**
- **Command and Response Tables for SIS Commands**

Host Device Connection

Use a computer running the HyperTerminal or Extron DataViewer utility, or a control system to enable serial control of the transmitter. To connect directly to an XTP T UWP 202, connect the computer to the XTP T UWP 202 through the front panel USB Config port or the rear panel RS-232 connector. The protocol for the serial port is as follows: 9600 baud, no parity, 8 data bits, 1 stop bit, no flow control.

SIS Programming Guide

Host-to-Device and Device-to-Host Communication

SIS commands consist of one or more characters per field. No special characters are required to begin or end a command sequence. When the XTP T UWP 202 determines that a command is valid, it executes the command and sends a response to the host device. All responses from the switcher to the host end with a carriage return and a line feed (CR/LF = ↵), which signals the end of the response character string. A string is one or more characters.

Device-Initiated Message

When the transmitter is connected through the serial port only and a local event occurs, the device responds by sending a message to the host.

The following copyright messages are displayed after a power cycle via RS-232. The specific message displayed depends on the XTP T UWP 202 model.

NOTE: Black and white models are not differentiated in the displayed part number.

`© Copyright YYYY, Extron Electronics XTP T UWP 202 Vx.xx, 60-1216-12↵`

`© Copyright YYYY, Extron Electronics XTP T UWP 202 NL, Vx.xx, 60-1410-12↵`

YYYY is the year. V*x.xx* is the firmware version number.

Error Responses

When the XTP T UWP 202 receives an SIS command and determines that it is valid, it performs the command and sends the corresponding response to the host device. If the command is determined invalid or contains invalid parameters, the switcher returns an error response to the host. The error response codes are:

- E01 = Invalid input number
- E06 = Invalid switch attempt in this mode
- E10 = Invalid command
- E11 = Invalid preset number
- E12 = Invalid port number
- E13 = Invalid parameter
- E14 = Not valid for this configuration
- E17 = Invalid command for signal type

Using the Command and Response Tables for SIS Commands

The command and response tables begin on page 20. Figure 17 shows the hexadecimal equivalent of ASCII characters used in the command and response tables.

NOTE: Upper and lowercase text can be used interchangeably unless otherwise stated.

ASCII to Hex Conversion Table

Space →	20	!	21	"	22	#	23	$	24	%	25	&	26	'	27
(	28	)	29	*	2A	+	2B	,	2C	-	2D	.	2E	/	2F
0	30	1	31	2	32	3	33	4	34	5	35	6	36	7	37
8	38	9	39	:	3A	;	3B	<	3C	=	3D	>	3E	?	3F
@	40	A	41	B	42	C	43	D	44	E	45	F	46	G	47
H	48	I	49	J	4A	K	4B	L	4C	M	4D	N	4E	O	4F
P	50	Q	51	R	52	S	53	T	54	U	55	V	56	W	57
X	58	Y	59	Z	5A	[	5B	\	5C	]	5D	^	5E	_	5F
`	60	a	61	b	62	c	63	d	64	e	65	f	66	g	67
h	68	i	69	j	6A	k	6B	l	6C	m	6D	n	6E	o	6F
p	70	q	71	r	72	s	73	t	74	u	75	v	76	w	77
x	78	y	79	z	7A	{	7B	|	7C	}	7D	~	7E	DEL	7F

Esc 1B CR 0D LF 0A

Figure 17. ASCII to Hexadecimal Conversion

Symbol Definitions

- ↵ = Carriage return and line feed
- | or ← = Carriage return with no line feed
- • = Space
- W or Esc = Escape key

Command and Response Tables for SIS Commands

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Input Commands			
Input selection			
Select input	X1 !	In X1 ↵	Select input X1.
View the selected input	!	In X1 ↵	View the selected input.
Auto switch mode			
Disable auto switch mode	Esc ØAUSW ←	AuswØ ↵	Switch inputs manually.
Set priority to the highest numbered active input	Esc 1AUSW ←	Ausw1 ↵	When available, automatically switch to the HDMI input (default).
Set priority to the lowest numbered active input	Esc 2AUSW ←	Ausw2 ↵	When available, automatically switch to the VGA input.
View setting	Esc AUSW ←	Ausw X3 ↵	View the auto switch mode.
Audio Configuration Commands			
Audio gain and attenuation			
NOTE: Gain and attenuation commands are case-sensitive.			
Set gain	X5 G	Aud X7 ↵	Set gain to X5.
Set attenuation	X6 g	Aud X7 ↵	Set attenuation to X6.
Increment audio level	+G or +g	Aud X7 ↵	Increase the audio level.
Decrement audio level	-G or -g	Aud X7 ↵	Decrease the audio level.
View audio level	G or g	Aud X7 ↵	View the audio level.
Audio input selection			
Set audio input format	Esc I X2 AFMT ←	AfmtI X2 ↵	Set the audio input format to X2.
View audio input format	Esc IAFMT ←	AfmtI X2 ↵	View the audio input format.
Black video signal resolution			
Set black signal resolution	Esc A X8 AFMT ←	AfmtA X8 ↵	Set the black signal resolution to X8.
View black signal resolution	Esc AAFMT ←	AfmtA X8 ↵	View the black signal resolution.

NOTE:

X1 = Input selection
- 1 = VGA
- 2 = HDMI (default)

X2 = Audio input format
- Ø = auto (default)
- 1 = digital embedded
- 2 = analog

X3 = Auto switch mode
- Ø = disable
- 1 = priority to the HDMI input (default)
- 2 = priority to the VGA input

X5 = Audio gain adjustment
- Ø - 24 = decibels above 0

X6 = Audio attenuation adjustment
- –18 - Ø = decibels below 0

X7 = Audio level adjustment
- –18 - +24 (Ø dB = default)

X8 = Black signal resolution
- 2 = 720p @ 50 Hz
- 4 = 720p @ 60 Hz (default)
- 6 = 1080p @ 60 Hz

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Black signal for audio only			
NOTE: The switcher uses a black signal to simulate a 720p or 1080p, 50 Hz or 60 Hz signal so audio can be passed without video.			
Enable black signal	Esc B1AFMT ←	AfmtB X9 ↵	Enable a black signal for audio only.
Disable black signal	Esc BØAFMT ←	AfmtB X9 ↵	Disable the black signal.
View black signal setting	Esc BAFMT ←	AfmtB X9 ↵	View the black signal setting.
Picture Adjustment Commands (Analog Only)			
Pixel phase			
Set a pixel phase value	Esc X13 PHAS ←	Phas X13 ↵	Adjust the pixel phase to X13.
Increment value	Esc +PHAS ←	Phas X13 ↵	Increase the pixel phase value.
Decrement value	Esc -PHAS ←	Phas X13 ↵	Decrease the pixel phase value.
View pixel phase value	Esc PHAS ←	Phas X13 ↵	Show the pixel phase value.
Horizontal shift			
Set horizontal shift value	Esc X14 HCTR ←	Hctr X14 ↵	Set the horizontal location of the first active pixel in the active window.
Increment value	Esc +HCTR ←	Hctr X14 ↵	Increase the shift value (move the image to the right).
Decrement value	Esc -HCTR ←	Hctr X14 ↵	Decrease the shift value (move the image to the left).
View horizontal shift value	Esc HCTR ←	Hctr X14 ↵	Show the horizontal location of the first active pixel in the active window.
Vertical shift			
Set vertical shift value	Esc X14 VCTR ←	Vctr X14 ↵	Set the vertical location of the first active pixel in the active window.
Increment value	Esc +VCTR ←	Vctr X14 ↵	Increase the shift value (move the image down).
Decrement value	Esc -VCTR ←	Vctr X14 ↵	Decrease the shift value (move the image up).
View vertical shift value	Esc VCTR ←	Vctr X14 ↵	Show vertical location of the first active pixel in the active window.
Image reset			
Execute an image reset	1A	Aadj1 ↵	Set picture adjustment settings to the default values.
Preset Commands			
Input presets			
Save an input preset	X15 ,	Spr X15 ↵	Save the current configuration to preset X15.
Recall an input preset	X15 .	Rpr X15 ↵	Recall the preset X15 configuration.

NOTE:
- X9 = Enable or disable — Ø = disable; 1 = enable (default)
- X13 = Pixel phase — Ø-255 (128 = default)
- X14 = Horizontal or vertical shift — Ø-65535 (32768 = default)
- X15 = Preset number — 1-8

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
EDID Commands			
NOTE: For EDID management, use the XTP System Configuration Software (see **EDID Minder** on page 34).			
Advanced Configuration Commands			
HDCP authorized device (HDMI input only)			
HDCP authorized device On	Esc E1HDCP←	HdcpE1↵	Designate the transmitter as an HDCP authorized device (default).
HDCP authorized device Off	Esc EØHDCP←	HdcpEØ↵	Do not designate the transmitter as an HDCP authorized device.
Query HDCP authorized device status	Esc EHDCP←	HdcpE X4 ↵	View the HDCP authorized device status.
Test pattern			
Set a test pattern	X10 J	Tst X10 ↵	Set a test pattern or disable one.
View the current test pattern	J	Tst X10 ↵	View the current test pattern setting.
Factory defaults			
System reset	Esc ZXXX←	Zpx↵	Resets unit to factory default.
Status			
View input signal presence	ØLS	Frq X11 X11 ↵	View the input signal presence of each input. In the response, the first X11 is the VGA input. The second X11 is the HDMI input.
Query HDCP input status	Esc IHDCP←	HdcpIØ X12 ↵	View the HDCP status of the HDMI input.
Query firmware version	Q	x.xx↵	View the firmware version.
Query full firmware version	*Q	x.xx.xxxx↵	View the full firmware version.
Query part number	N	6Ø-1216-12↵ or 6Ø-141Ø-12↵	View the device part number. The response is based on the model. Black and white models are not differentiated.

NOTE:

X4 = HDCP authorization	Ø = HDCP authorization off 1 = HDCP authorization on (default)
X10 = Color bars test pattern	Ø = disable (default) 1 = 720p @ 50 Hz 3 = 720p @ 60 Hz 5 = 1080p @ 60 Hz
X11 = Video signal status	Ø = video or TMDS not detected 1 = video or TMDS detected
X12 = HDCP status	Ø = no source connected 1 = HDCP compliant source 2 = non-HDCP compliant source

XTP System Configuration Software

This section contains installation and configuration procedures for the XTP System Configuration Software for configuring and controlling the XTP T UWP 202. It can also be controlled with SIS commands (see **SIS Configuration and Control** on page 18). Topics in this section include:

- **Installing the XTP System Configuration Software**
- **Using the XTP System Configuration Software**

Installing the XTP System Configuration Software

The program is available for download on the Extron website, **www.extron.com**.

Figure 18. Extron Website Download Page

1. On the Extron website, click the **`Download`** tab (see figure 18, ❶).
2. From the left sidebar, click the **`XTP System Configuration Software`** link (see figure 18, ❷).
3. Click the **`Download Now`** button (see figure 18, ❸).
4. Submit any required information to start the download. Note where the file is saved.
5. Open the executable (.exe) file from the location where it was saved.
6. Follow the instructions that appear on the screen. By default, the installation creates a directory in the appropriate Program Files folder named “Extron Electronics\XTP System Configuration.”

Using the XTP System Configuration Software

The XTP T UWP 202 can be controlled directly from the front panel Config port or remotely from an XTP matrix switcher.

Connections

When opening the XTP System Configuration Software, the Connections screen opens first. This screen is used to establish communication with an XTP device through USB connection (see **Configuration port** on page 11). Ensure the transmitter is connected and powered on before attempting to connect to it.

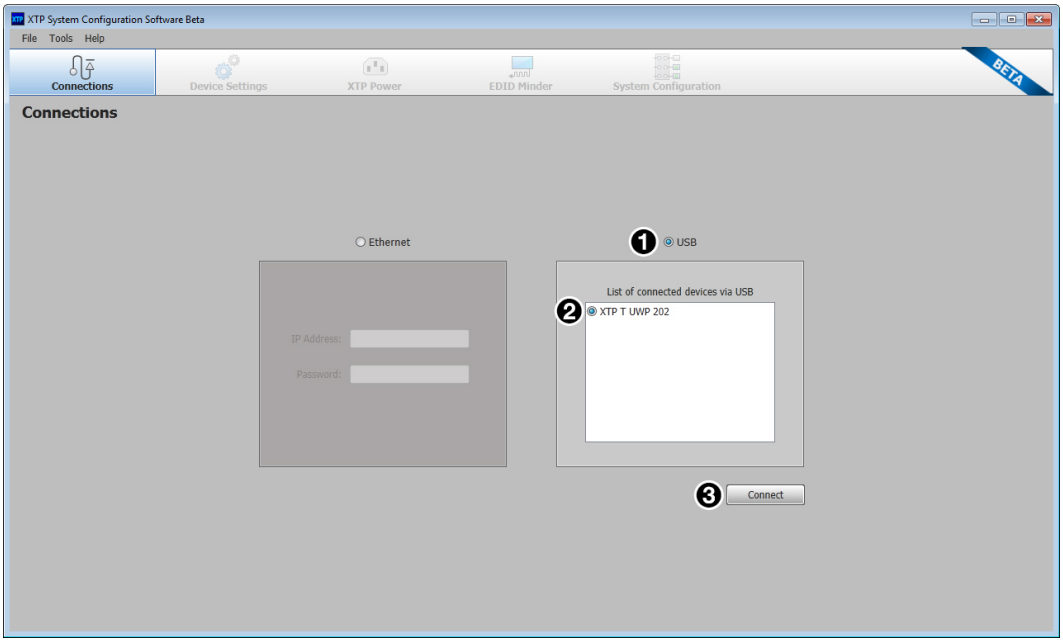


Figure 19. Connections Screen

1. From the Connections screen in the software, select the **USB** radio button (see figure 19, ❶).
2. Select the connected device to be controlled from the displayed list (see figure 19, ❷).
3. Click the **Connect** button (see figure 19, ❸). The Device Settings screen opens.

Top Menu

The top menu bar contains three menus for configuring software settings.

File menu

The **File** menu contains options for disconnecting from the transmitter and exiting the program. To access the menu, click the **File** menu.

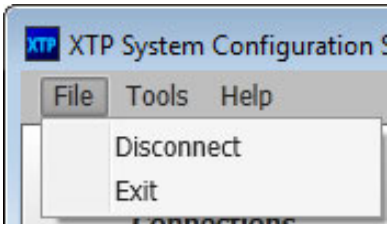


Figure 20. File Menu

Disconnect

This option disconnects the connected device from the XTP System Configuration Software.

From the **File** menu, select **Disconnect**. The Connections screen opens.

NOTE: If the device is already disconnected, the **Disconnect** option is disabled until a device is connected.

Exit

This option disconnects the transmitter from the software and closes the application.

From the **File** menu, select **Exit**. The application closes.

Tools menu

The **Tools** menu contains an option for updating firmware. To access this menu, click the **Tools** menu.

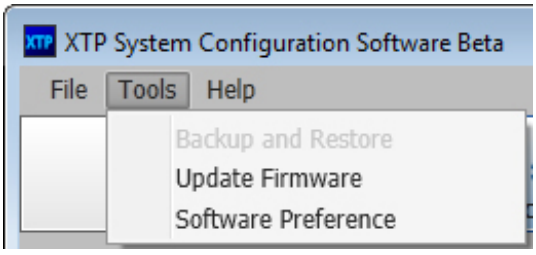


Figure 21. Tools Menu

NOTE: The **Backup and Restore** and **Software Preference** options are not available when directly connected to the XTP T UWP 202.

Update Firmware

This option uploads firmware from the host device to the connected device.

NOTE: If necessary, download new firmware from the Extron website (see **Downloading Firmware** on page 38).

1. From the **Tools** menu, select **Update Firmware**. A dialog box opens to ask permission to disconnect from the device.

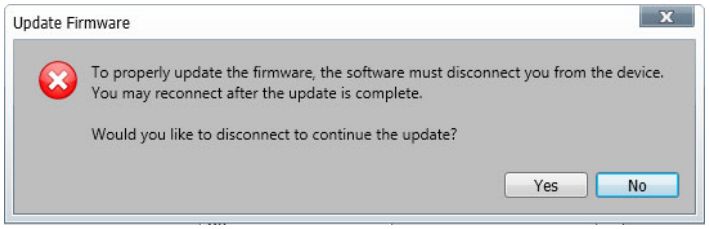

Update Firmware
To properly update the firmware, the software must disconnect you from the device.
You may reconnect after the update is complete.
Would you like to disconnect to continue the update?
Yes
No

Figure 22. Confirm Disconnect Dialog Box

2. Click the **Yes** button to disconnect from the device and continue with the firmware update process. The Update Firmware dialog box opens.

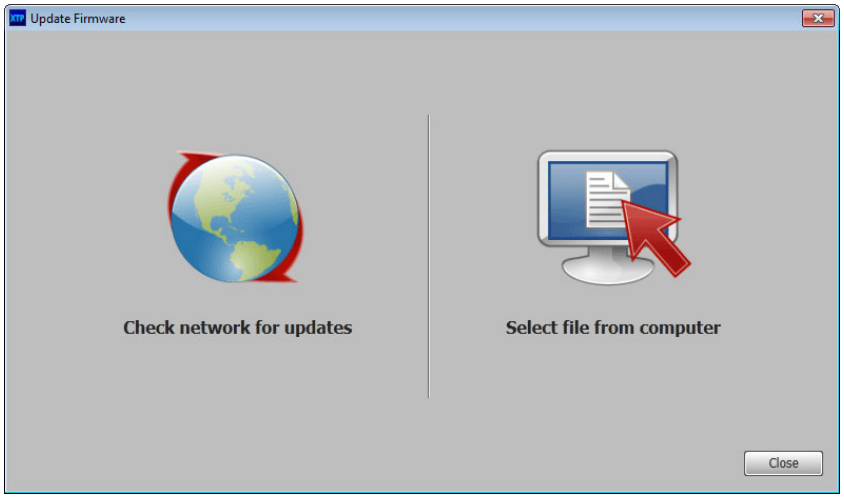


Figure 23. Update Firmware Dialog Box

3. Click the **Check network for updates** icon to search the LAN or WAN for firmware files or click the **Select file from computer** icon to select a firmware file from the connected host device. The Browse dialog box opens.
4. Select the desired firmware file and click the **Open** button.
5. Click the **Close** button after the firmware finishes updating.

Help menu

The **Help** menu contains a way to access XTP System Configuration Software information, a link to the help file, and a link to the Extron website.

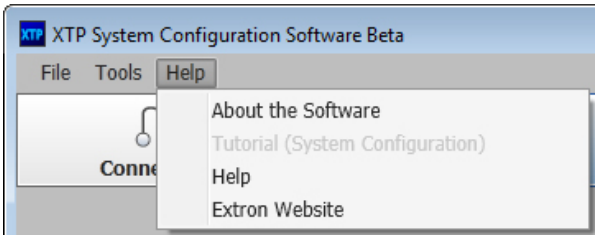


Figure 24. Help Menu

NOTE: The **Tutorial (System Configuration)** option is not available when directly connected to the XTP T UWP 202.

About the Software

This option provides basic information about the XTP System Configuration Software, including version number and copyright information.

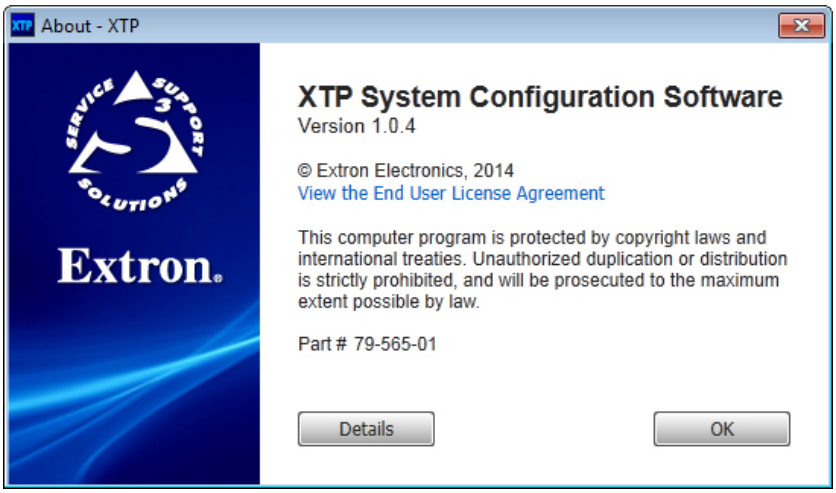

About - XTP
XTP System Configuration Software
Version 1.0.4
© Extron Electronics, 2014
View the End User License Agreement
This computer program is protected by copyright laws and international treaties. Unauthorized duplication or distribution is strictly prohibited, and will be prosecuted to the maximum extent possible by law.
Part # 79-565-01
Details
OK
Extron

Figure 25. About - XTP Dialog Box (Example)

1. From the **Help** menu, select **About the Software**. The About - XTP dialog box opens.
2. Click the **Details** button for more information.
3. Click the **Ok** button to close the dialog box.

Help

This option opens the *XTP System Configuration Software* help file in a Web browser.

From the **Help** menu, select **Help**.

Extron Website

This option opens the Extron website in a Web browser.

From the **Help** menu, select **Extron Website**.

Device Settings

The Device Settings screen allows a user to view and edit various device settings for the device directly connected to the PC running the XTP software. Click the **Device Settings** icon (see figure 26, ❶) on the Global Navigation bar to open the Device Settings screen.

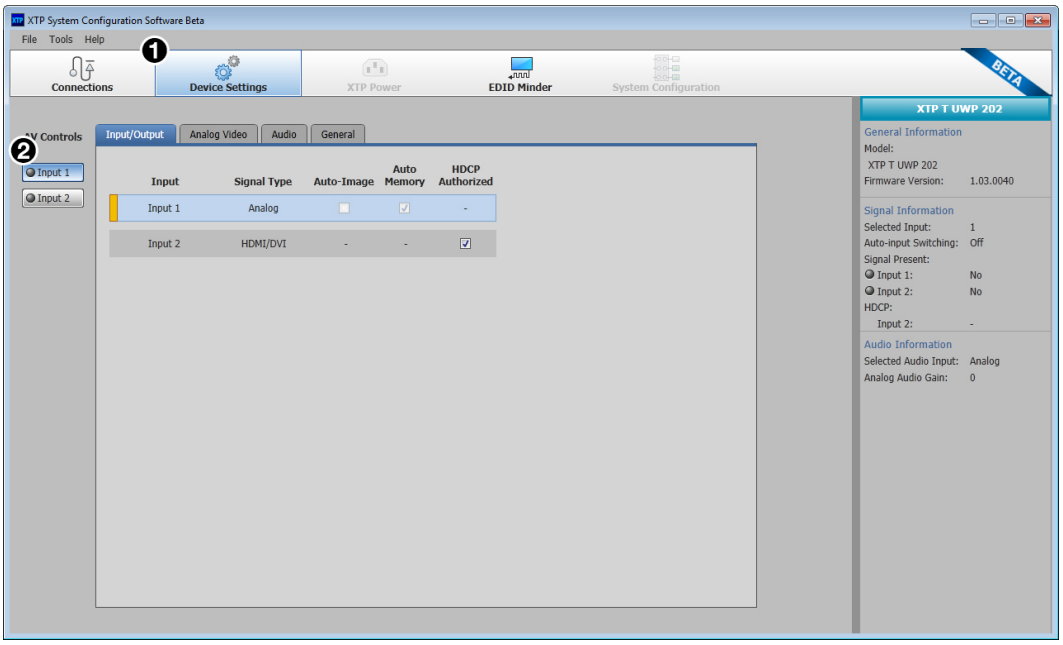
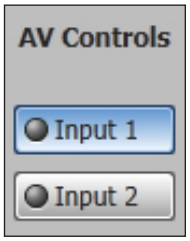


Figure 26. Transmitter Device Settings Screen

AV Controls panel

The AV Controls panel, located on the left, is used to selection an input.



❷ **Input selection** — Click an **Input** button to select an input. As a new input is selected, the summary within the device information panel (to the far right in figure 26) changes to reflect the currently selected input.

NOTE: The signal indicators on the AV input buttons display green when a signal is present on the corresponding input or gray when there is no signal present.

Input/Output tab

Click the **Input/Output** tab (see figure 27, ❶) to open the Input/Output screen. It contains input information and options to apply automatic settings to individual inputs.

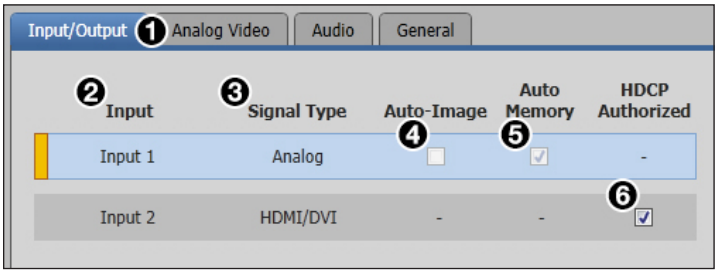


Figure 27. Input/Output Tab

❷ **Input** — Displays the input name.

❸ **Signal Type** — Displays the signal type of each input. Input 1 is `analog`. Input 2 is `HDMI/DVI`.

❹ **Auto-Image** — Attempts to size and center the input signal based on the aspect ratio setting. Auto-Image is applied whenever there is a change in the input sync.

❺ **Auto Memory** — Recalls input and image settings for signals that have previously been applied. When it is disabled, the XTP T UWP 202 treats every newly applied input as a new source.

❻ **HDCP Authorization** — Select the **HDCP Authorized** check box to have input 2 report as an HDCP authorized device. If the box is not checked, the source will be blocked from encrypting its output. This may result in some content not being passed by the source device.

Analog Video tab

Click the **Analog Video** tab (see figure 28, ❶) to open the Analog Video screen. It contains signal sampling, image shifting, and saving and recalling input preset options.

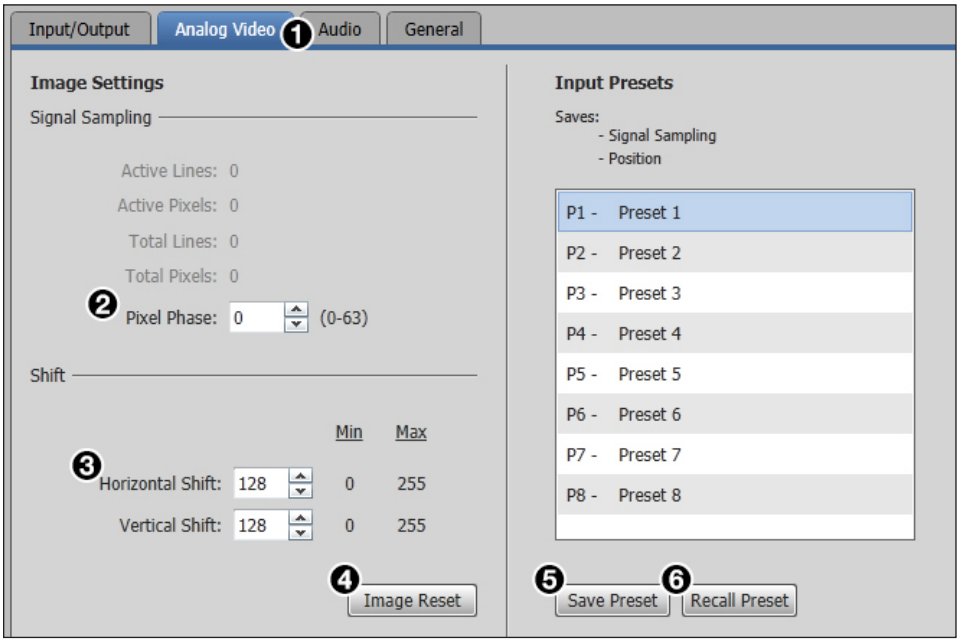


Figure 28. Analog Video Tab

Image Settings panel

Signal sampling optimizes the input signal to the transmitter for the currently selected input.

❷ **Signal Sampling** — To adjust signal sampling settings, enter a value within acceptable range displayed in parentheses to the right of the corresponding field or click the **Up** and **Down** arrows.

❸ **Horizontal and Vertical Shift** — To adjust the horizontal and vertical shift settings, enter a value within the Min and Max values displayed to the right of the corresponding field or click the **Up** or **Down** arrows.

❹ **Image Reset** — Click the **Image Reset** button to set pixel phase, horizontal shift, and vertical shift to the default values.

Input Presets panel

Input presets save signal sampling and shift settings to be recalled later.

❺ **Save Preset** — To save a preset, select one from the list of presets and click the **Save Preset** button.

❻ **Recall Preset** — To recall a saved preset, select the desired preset from the list of presets and click the **Recall Preset** button.

Audio tab

Click the **Audio** tab (see figure 29, ❶) to open the Audio screen. It contains settings for audio input format and analog audio gain.

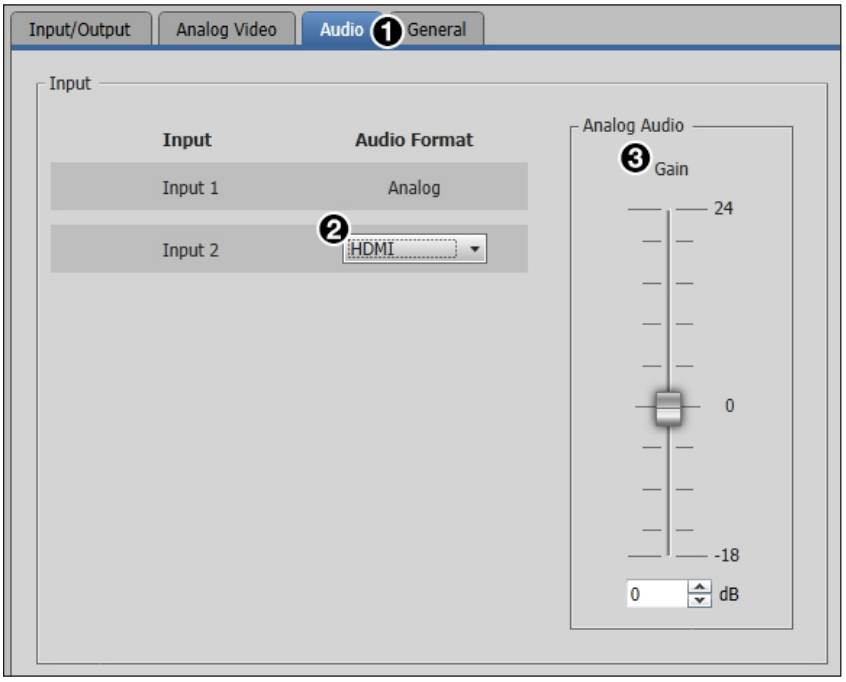


Figure 29. Audio Tab

Input format panel

❷ **Input format** — From the **Audio Format** drop-down list, select the format for input 2. It can be Auto, HDMI, or Analog.

❸ **Analog audio gain** — Click and drag the handle of the **Gain** slider, enter a value in the field, or click the **Up** or **Down** arrow to adjust the analog input gain.

General tab

Click the **General** tab (see figure 30, ❶) to open the General screen. It contains settings for auto switch mode and factory reset.

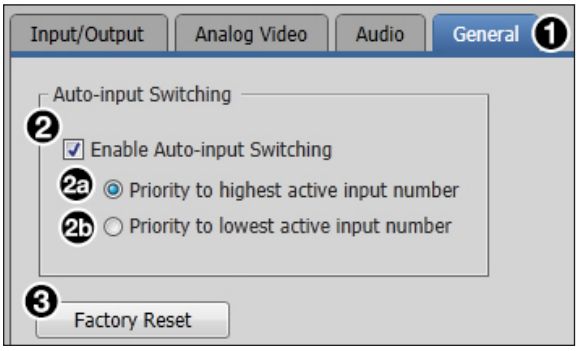


Figure 30. General Tab

Auto-input Switching panel

❷ **Auto-input Switching** — Click the **Enable Auto-Input Switching** check box to enable auto switch mode. Two settings are available for this mode:

- ❷a Click the **Priority to highest active input number** radio button to automatically switch to the highest numbered active input (HDMI).
- ❷b Click the **Priority to lowest active input number** radio button to automatically switch to the lowest numbered active input (VGA).

Factory reset

❸ **Factory Reset** — Click the **Factory Reset** button to reset the transmitter to factory settings except for firmware.

NOTE: This is the same as the Esc ZXXX SIS command (see the **System reset command** on page 22).

Device Information panel

The Device Information panel on the right side of the software screen displays device information and settings.

General Information section

❶ **Model** — Displays the device model.

❷ **Firmware version** — Displays the full firmware version.

Signal Information section

❸ **Selected input** — Displays the input number of the currently selected input (1 = VGA input and 2 = HDMI input).

❹ **Auto-input switching** — Displays the On or Off status of auto switch mode.

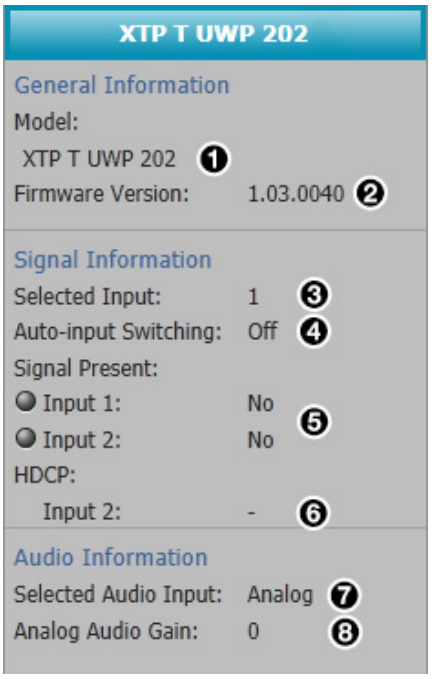
❺ **Signal present** — Displays the signal presence of both inputs.

❻ **HDCP** — Displays the HDCP status of input 2.

Audio Information section

❼ **Selected audio input** — Displays the format of the currently selected audio input.

❽ **Analog audio gain** — Displays the analog audio gain in dB.



EDID Minder

Use the EDID Minder screen to assign unique EDID to the input or match current output resolutions to the input. Click the **EDID Minder** icon (see figure 31, ❶) on the global navigation bar. The EDID Minder screen opens.

The EDID Minder screen displays a table of EDID options and connected output devices, which are each represented by output display icons.

- Factory default EDID options are displayed in blue.
- Connected output resolutions and devices are displayed in green.
- Custom loaded or saved EDID options are displayed in yellow.

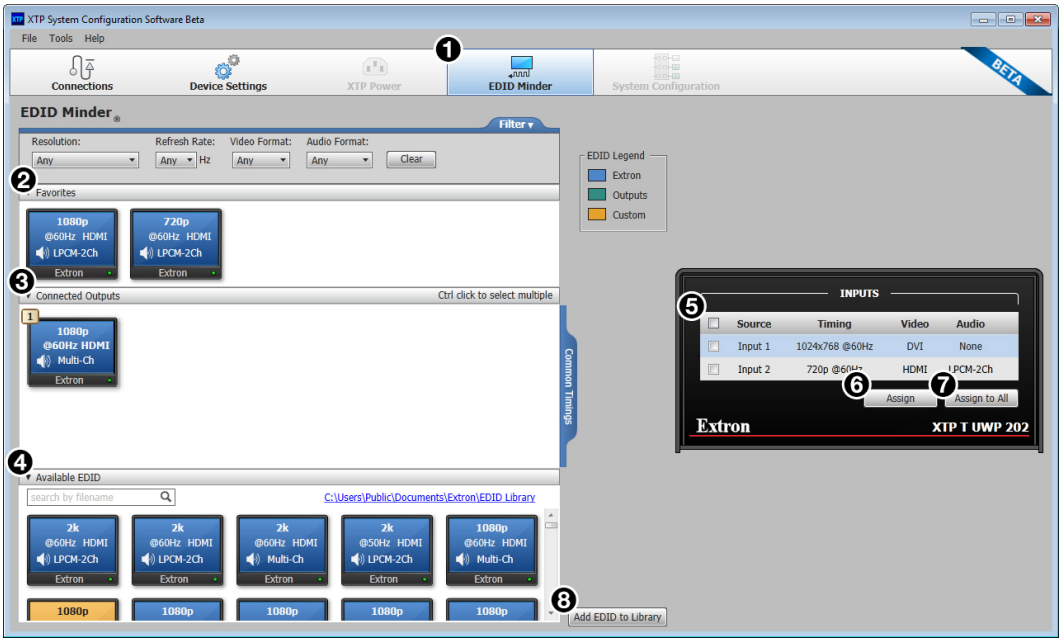


Figure 31. EDID Minder Screen

Assign EDID

To assign EDID to selected inputs:

1. Select an available EDID setting (represented by a blue, green, or yellow output display icon) from the Favorites, Connected Outputs, or Available EDID panel (see figure 30, ❷-❹).
2. In the list of inputs on the right side of the screen, select the check box of the connected input (see figure 30, ❺).
3. Click the **Assign** button below the input area (see figure 30, ❻).

TIP: Alternatively, EDID can be assigned by dragging and dropping the desired EDID onto the input.

To assign EDID to all inputs:

1. Select an available EDID setting (represented by a blue, green, or yellow output display icon) from the Favorites, Connected Outputs, or Available EDID panel (see figure 30, ❷-❹).
2. Below the list of inputs on the right side of the screen, click the **Assign to All** button (see figure 30, ❼).

Import EDID

1. On the EDID Minder screen, click the **Add EDID to Library** button (see figure 31, ❽). The Browse window opens.
2. Select the desired EDID file and click **Open**. The EDID appears in the Available EDID panel (see figure 31, ❹).
3. Assign the EDID from the Available EDID panel to import the EDID setting to the device.

Save output EDID

1. On the EDID Minder screen, right-click on the desired EDID setting in the **Connected Outputs** panel (see figure 31, ❸).
2. Select the **Save EDID to PC** option. The EDID setting is saved to the connected PC. Alternatively, right-click on the desired EDID, select **Copy**, and then **Paste** the EDID into the Favorites or Available EDID panel.

Set favorite EDID

Commonly used EDID settings can be added to the Favorites panel for quick access.

1. Click and drag the desired EDID from the Connected Outputs or the Available EDID panel to the Favorites panel. The EDID setting is copied to the Favorites panel (see figure 31, ❷). Alternatively, right-click the desired EDID and select **Copy**. Then **Paste** the EDID setting into the Favorites panel.

EDID filters

The filters can be used to easily locate a specific EDID setting. Selectable filters include:

❶ Resolution

❷ Refresh Rate

❸ Video Format

❹ Audio Format

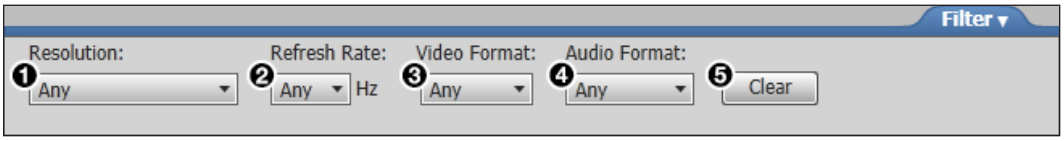


Figure 32. EDID Minder Filters

To use a filter or combination of filters:

1. Select an EDID setting from one of the drop-down lists of the associated filter (see figure 32, ❶-❹). The available EDID options that match the filter selection are displayed in their respective panels.
2. Repeat step 1 to apply more filters.

To clear the currently applied filters:

1. Click the **Clear** button next to the filters (see figure 32, ❺). All filters are reset.

Common timings

This function automatically displays available EDID settings that are common among multiple selected outputs.

1. Hold <Ctrl> and click the desired outputs in the Connected Outputs panel. The **Common Timings** tab appears, listing the EDID settings common among the selected outputs.
2. Select the desired common EDID setting. The EDID will be shown in the Available EDID panel.

Reference Information

This section contains mounting information and instructions for updating firmware. Topics in this section include:

- **Updating Firmware with Firmware Loader**
- **Mounting Template**

Updating Firmware with Firmware Loader

To upload and update firmware for the XTP T UWP 202, download the new firmware to a connected computer and upload the firmware with the Firmware Loader utility.

Downloading Extron Firmware Loader

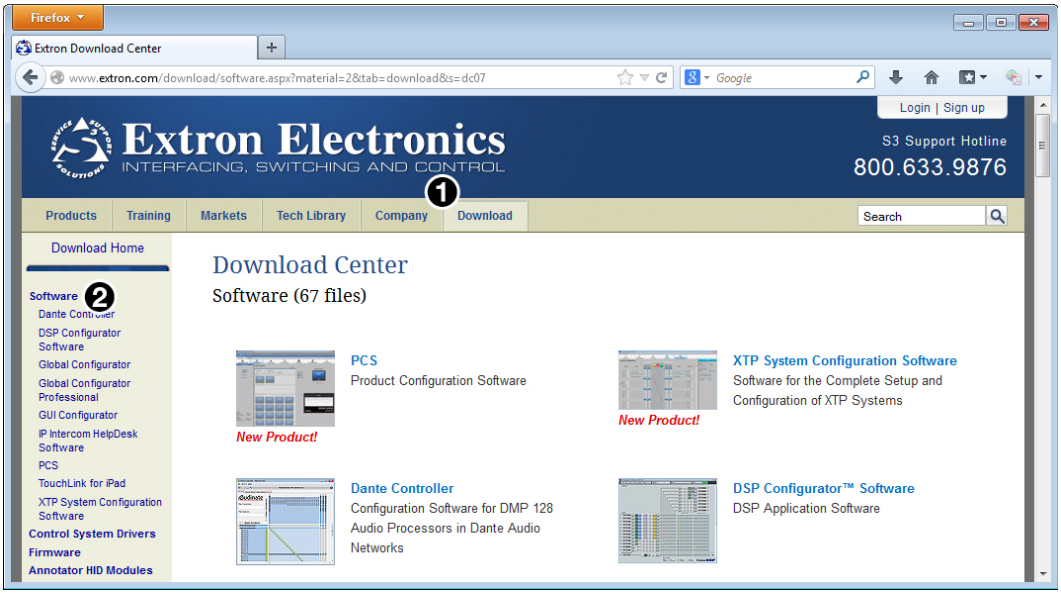


Figure 33. Locating Software on the Extron Website

1. On the Extron **website**, click the **`Download`** tab (see figure 33, ❶).
2. On the left sidebar, click the **`Software`** link (see figure 33, ❷).

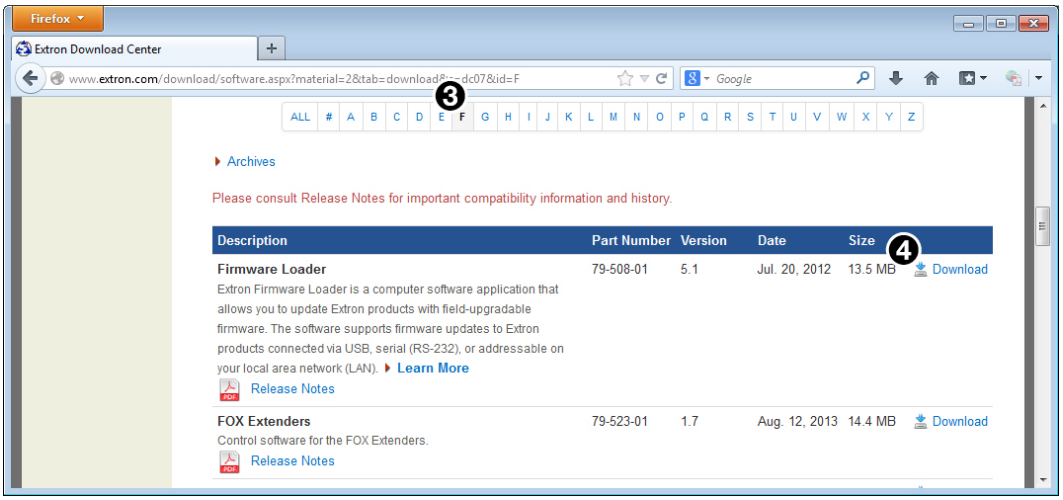

Firefox
Extron Download Center
www.extron.com/download/software.aspx?material=2&tab=download&ic=dc07&id=F
Google
3
ALL # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Archives
Please consult Release Notes for important compatibility information and history.
Description
Part Number
Version
Date
Size
4
Firmware Loader
79-508-01
5.1
Jul. 20, 2012
13.5 MB
Download
Extron Firmware Loader is a computer software application that allows you to update Extron products with field-upgradable firmware. The software supports firmware updates to Extron products connected via USB, serial (RS-232), or addressable on your local area network (LAN).
Learn More
Release Notes
FOX Extenders
79-523-01
1.7
Aug. 12, 2013
14.4 MB
Download
Control software for the FOX Extenders.
Release Notes

Figure 34. Navigating to Firmware Loader

3. Click the **F** link and navigate to Firmware Loader (see figure 34, ❸).
4. Click the **Download** link on the right that corresponds with the program (see figure 34, ❹).
5. Submit any required information to start the download. Note where the file is saved.

Installing Firmware Loader

1. Once Firmware Loader has been downloaded, run the .exe file from the location where the file was saved. The installation wizard window opens.
2. Follow the instructions on the Installation Wizard screens to install Firmware Loader on the computer.

Downloading Firmware

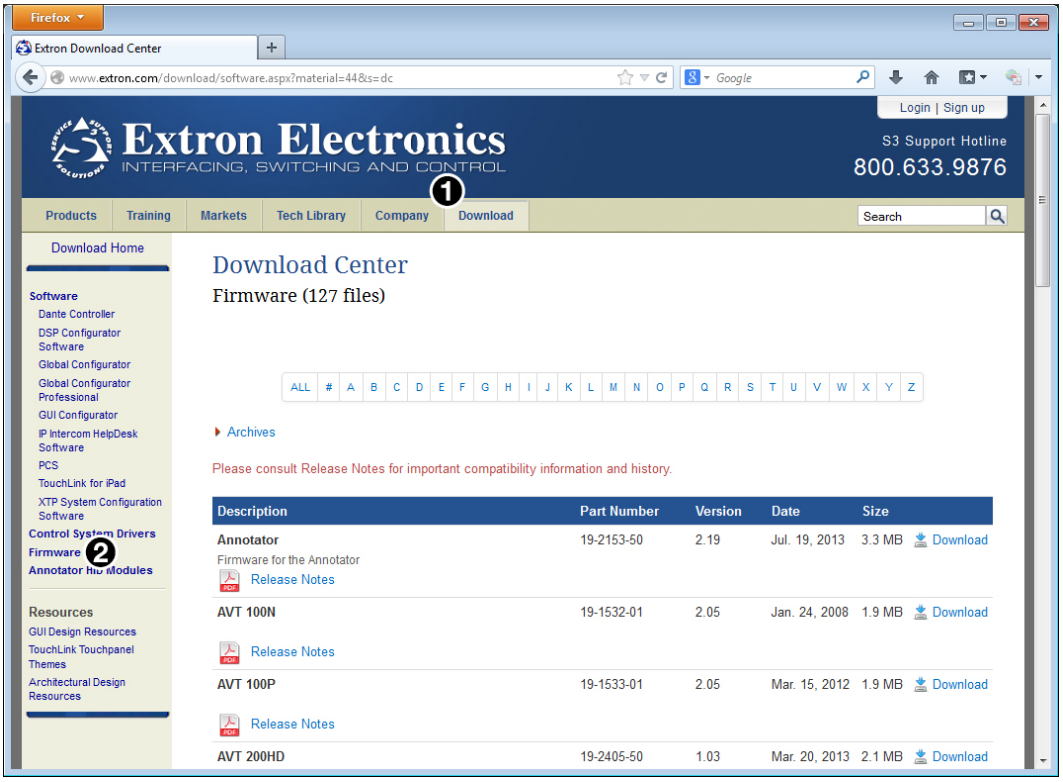


Figure 35. Downloading Firmware from the Extron Website

1. On the Extron **website**, click the **Download** tab (see figure 35, ❶).
2. On the left sidebar, click the **Firmware** link (see figure 35, ❷).
3. Navigate to the XTP T UWP 202.
4. Ensure the available firmware version is a later version than the current one on the device.

   NOTE: The firmware release notes are a PDF file that provides details about the changes between different firmware versions. The file can be downloaded from the same page as the firmware.

5. Click the **Download** link to the right of the desired device.
6. Submit any required information to start the download. Note where the file is saved.

Installing Firmware with Firmware Loader

Use the Firmware Loader utility to upload firmware to the transmitter when connected directly to the device.

1. Connect the host device to the front panel USB port.
2. Open Firmware Loader and establish a connection between the computer and the device. The Add Device... dialog box opens.

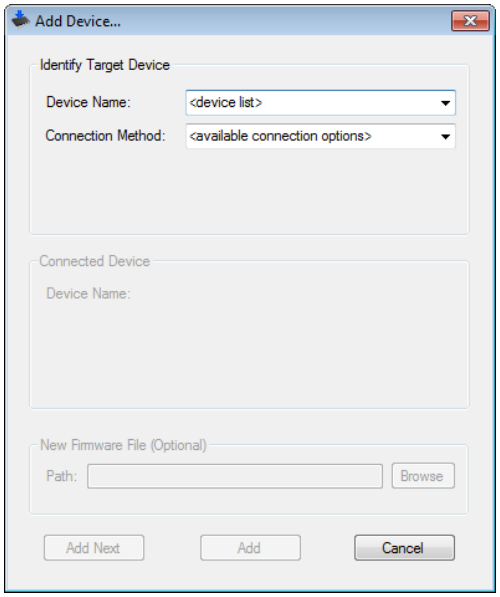


Figure 36. Add Device... Dialog Box

3. From the **Device Name** drop-down list, select **XTP T UWP 202**.
4. From the **Connection Method** drop-down list, select the method of connection.
5. Depending on the connection method, additional options appear. Make the appropriate selections for the current connection method.
6. Click the **Connect** button.
7. Click the **Browse** button in the New File Firmware (Optional) section. The Open dialog box opens.
8. In the Open dialog box, navigate to the new firmware file, which has an .S19 extension, and select it.

ATTENTION: Valid firmware files must have the file extension .S19. A file with any other extension is not a firmware upgrade for this device and could cause the device to stop functioning.

9. Click the **Open** button. The Browse dialog box closes.
10. Click the **Add** button. The Add Device... dialog box closes and the device and firmware are listed in the Firmware Loader main window.
11. Click the **Begin** button to start the upload process.
12. Close Firmware Loader when the **Remaining Time** field shows **00.00.00**, the **Progress** column is **100%**, and the **Status** field is **completed**.

Mounting Template

Figure 37 is a example of a mounting template for preparing mounting surfaces. It is not to full size.

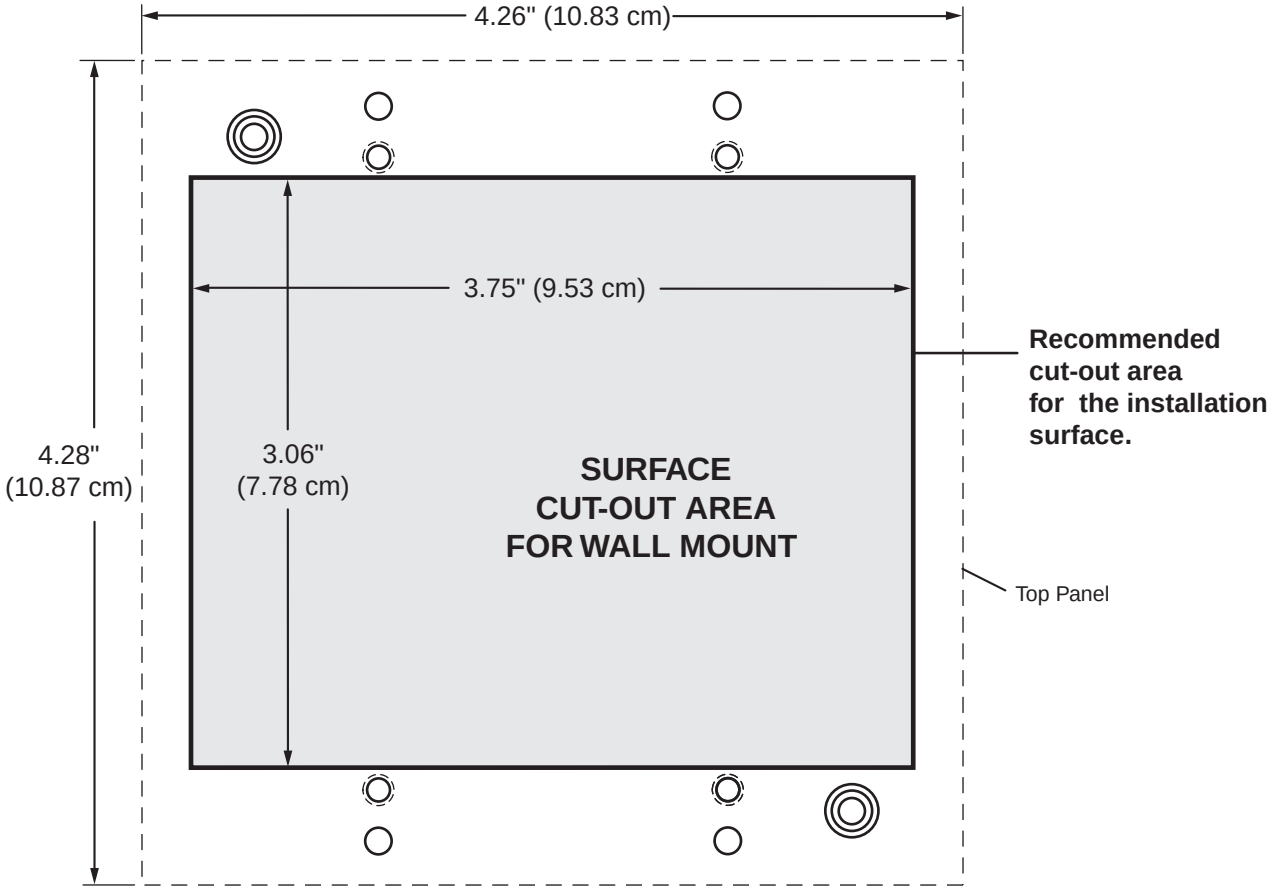


Figure 37. Mounting Template for 2-gang Mud Rings

NOTE: Measure the template before cutting.

Extron Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:
Extron Electronics
1230 South Lewis Street
Anaheim, CA 92805
U.S.A.

Japan:
Extron Electronics, Japan
Kyodo Building, 16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

Europe and Africa:
Extron Europe
Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

China:
Extron China
686 Ronghua Road
Songjiang District
Shanghai 201611
China

Asia:
Extron Asia Pte Ltd
135 Joo Seng Road, #04-01
PM Industrial Bldg.
Singapore 368363
Singapore

Middle East:
Extron Middle East
Dubai Airport Free Zone
F12, PO Box 293666
United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or if modifications were made to the product that were not authorized by Extron.

NOTE: If a product is defective, please call Extron and ask for an Application Engineer to receive an RA (Return Authorization) number. This will begin the repair process.

USA: 714.491.1500 or 800.633.9876 **Europe**: 31.33.453.4040
Asia: 65.6383.4400 **Japan**: 81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

Extron Headquarters		Extron Europe	Extron Asia	Extron Japan	Extron China	Extron Middle East	Extron Korea	Extron India
+1.800.633.9876 (Inside USA/Canada Only)		+800.3987.6673 (Inside Europe Only)	+65.6383.4400	+81.3.3511.7655	+86.21.3760.1568	+971.4.299.1800	+82.2.3444.1571	1800.3070.3777 Inside India Only
Extron USA - West	Extron USA - East	+31.33.453.4040	+65.6383.4664 FAX	+81.3.3511.7656 FAX	+86.21.3760.1566 FAX	+971.4.299.1880 FAX	+82.2.3444.1575 FAX	+91.80.3055.3777
+1.714.491.1500	+1.919.850.1000	+31.33.453.4050 FAX						+91.80.3055.3737 FAX
+1.714.491.1517 FAX	+1.919.850.1001 FAX							

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